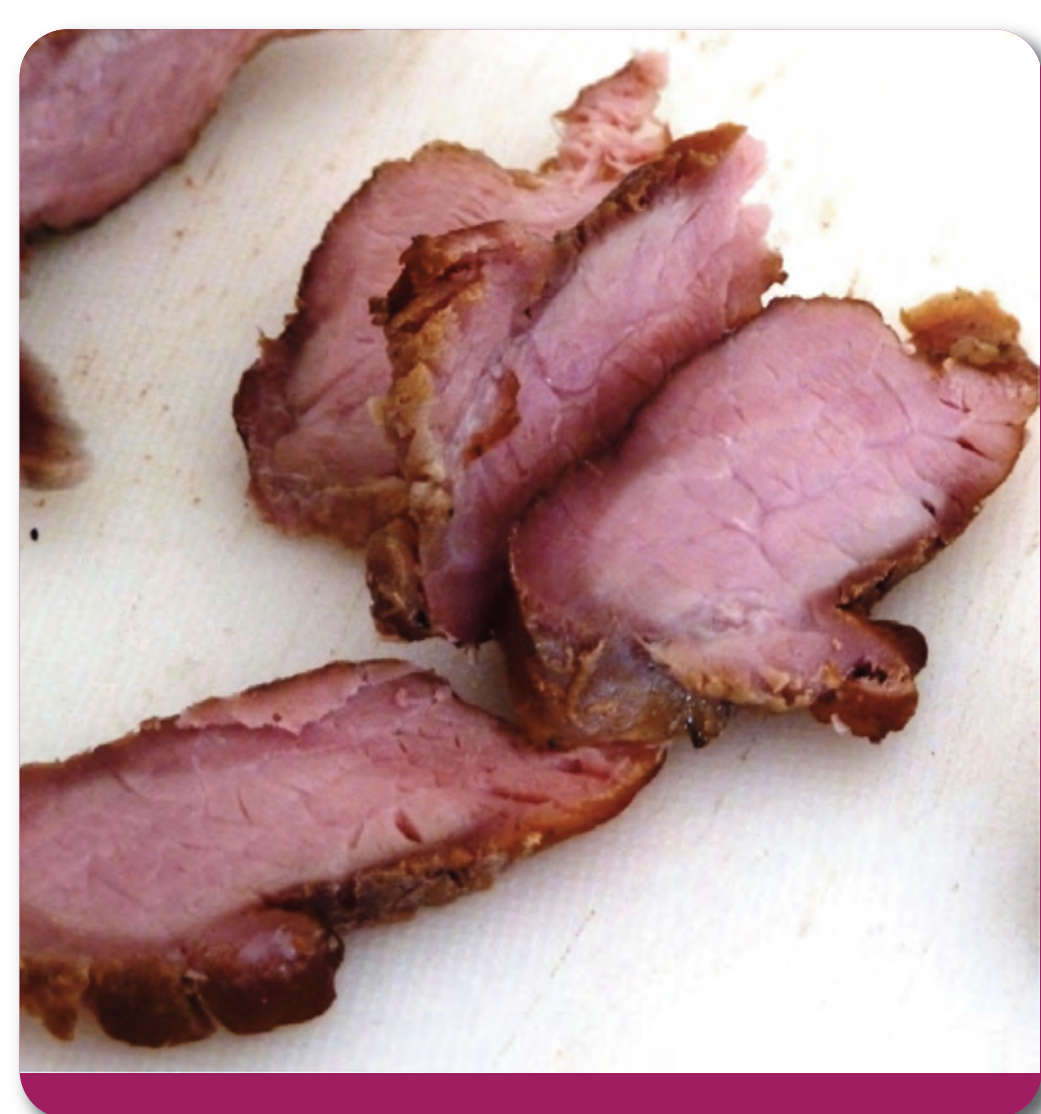


KITOZA is a traditional Malagasy meat product. It is made from beef or pork strips, dried and/or smoked. Dried Kitoza prepared traditionally at home is the most consumed, even nowadays. Some processors produce actually smoked Kitoza, but the process varies greatly and leads to products with irregular sensory and sanitary quality and short shelf life.

The objective of this study in Madagascar was to establish the sensory profile of 8 beef and pork smoked Kitoza provided by different producers, and their acceptance by Malagasy and European consumers.

Smoked Kitoza process

● Strips of beef or pork are cut from various pieces of meat, added with ingredients and preservative, macerated (1 to 5 hours) and hung above the fire for smoking (45 min to 2h30). They are sold in butcheries or markets.



Methodology

Sensory tests: Quantitative Descriptive Analysis

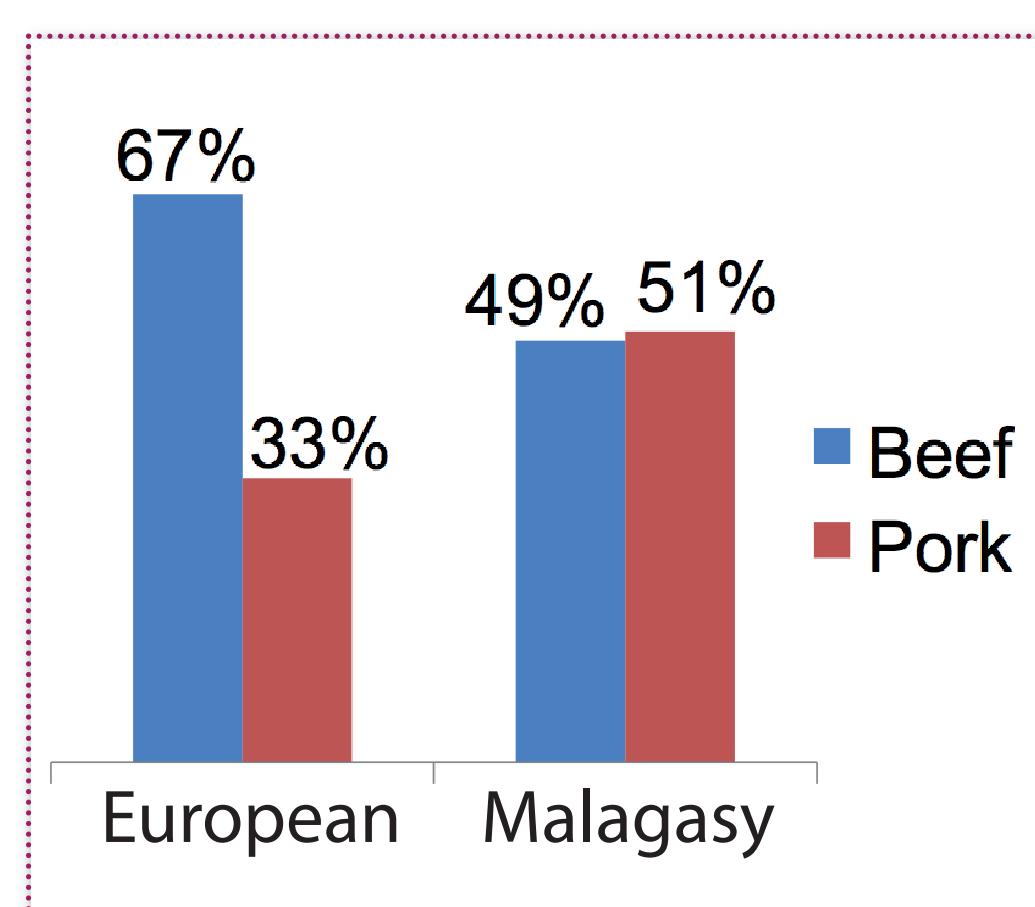
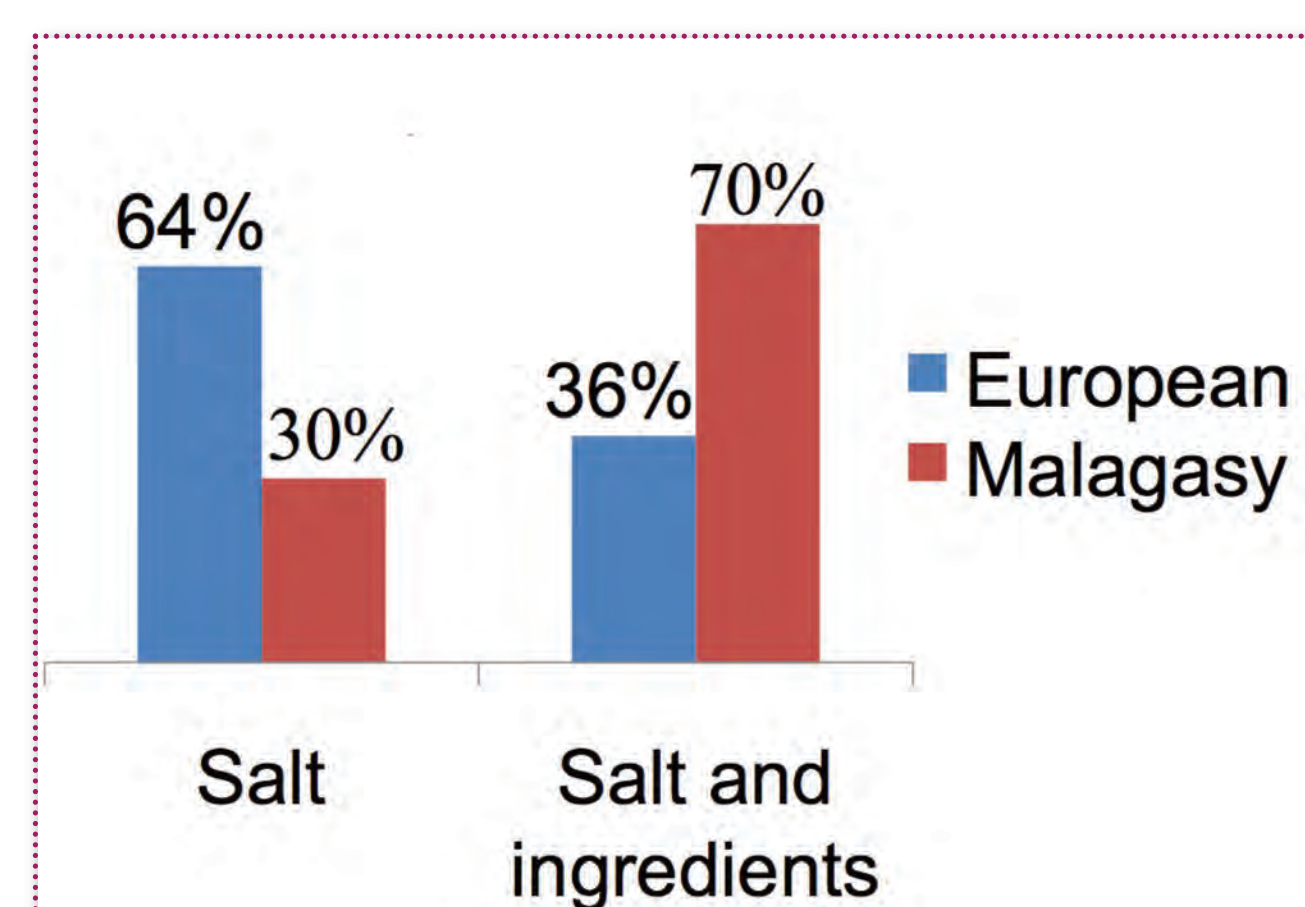
● Sensory profile of 8 smoked Kitoza (4 beef and 4 pork) was established by a panel (n=18), with 14 descriptors generated in consensus. Four Kitoza samples per session were presented to the panellists and the intensity of each attribute was scored using a 100 mm unstructured line scale.



Consumer acceptance

● Consumer acceptance was tested at different locations on the 4 Kitoza samples identified significantly different by a Hierarchical Cluster Analysis of their sensory data.

A total of 168 consumers, Malagasy (n=100) and Europeans (n=68), were interviewed using the central location method. Consumers were invited to taste and score the acceptability of the samples with respect to appearance, taste and overall liking using a nine-point hedonic scale.



Conclusion

SMOKED Kitoza is a tasty product, well accepted by Malagasy people of different social classes and even Europeans. The results of this study provide information that will be useful for improving the process while meeting consumer demand for local or new markets.

Sensory and consumer acceptance of Kitoza, a Malagasy meat product

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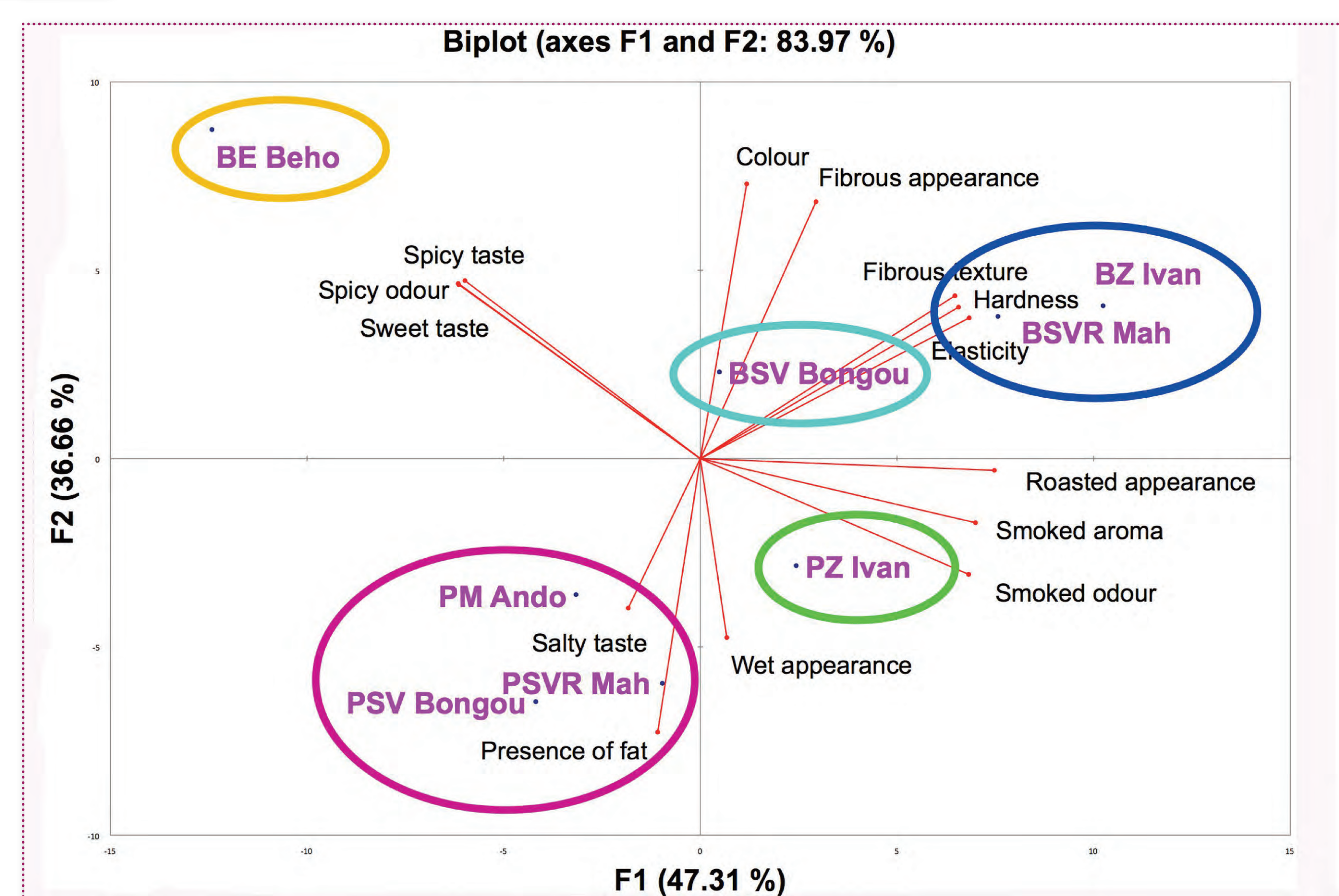
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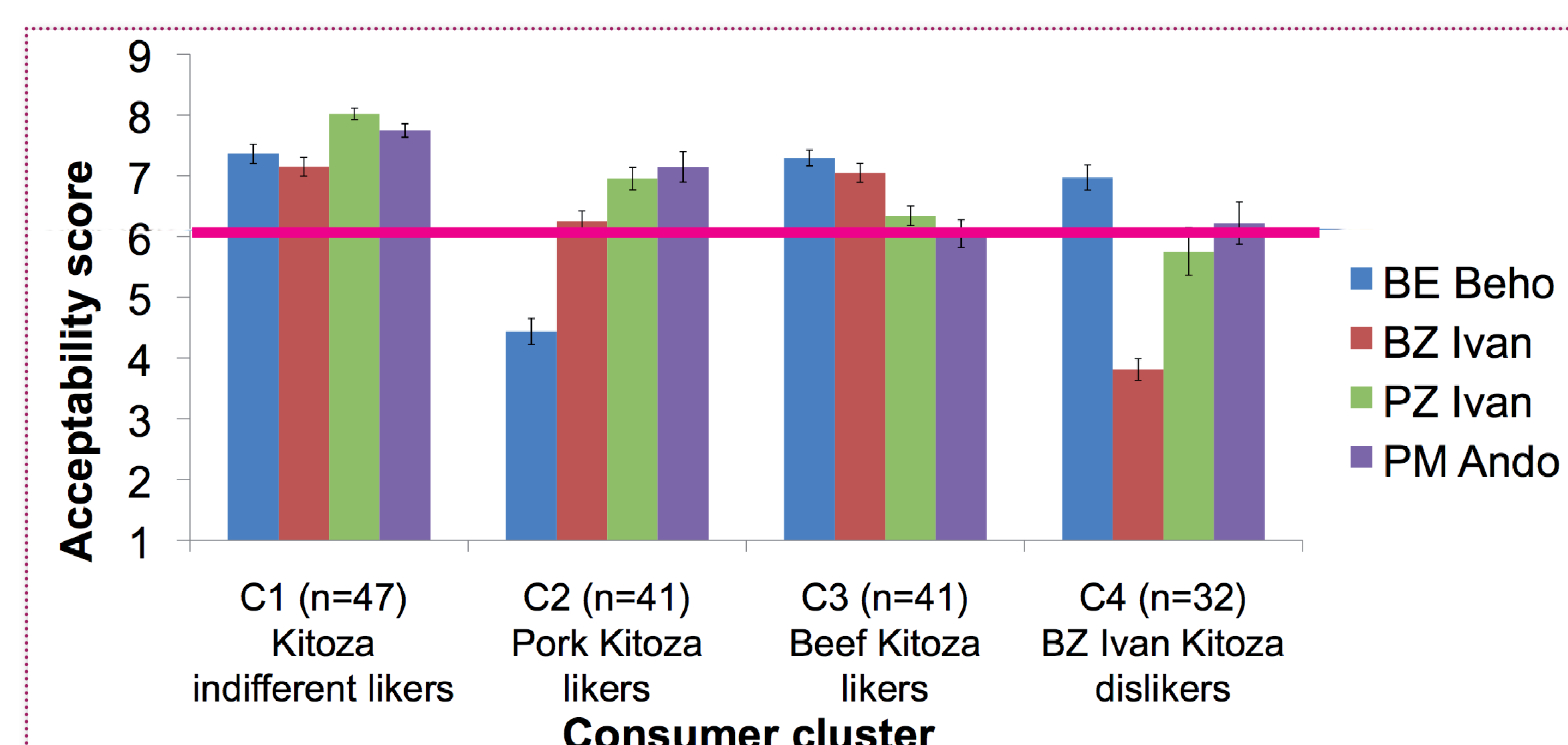
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Results



● Pork samples were more associated to fatty and salty attributes while Beef samples differed, depending of the process.



● **Four groups of consumers** were identified using a Cluster Analysis. The mean overall acceptability of the four smoked kitoza was 6.6 (like moderately). The least liked, Beef Kitoza BZ Ivan, differed significantly from the others (one way Anova) and was described as fibrous and harder by the panellists.

● **Consumption attitudes of Malagasy and Europeans** was explored:

- Pork likers was composed of 70% of single consumers and Beef likers accounted for 71% of married consumers (p<0.0001, Chi2 test).
- 61% of Europeans never consumed and 51% of the Malagasy consumed rarely smoked Kitoza (p<0.0001, Chi2 test), which is an expensive product in Madagascar but with a still rising popularity.
- Both would prefer a tender meat, grilled, smooth, with a dark or light colour. Their favourite piece of meat was for both the fillet.

